



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,827	02/08/2001	Laurent Frouin	1807.1093	9520
5514	7590	06/01/2005	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			BLOUNT, STEVEN	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/778,827

Applicant(s)

FROUIN ET AL.

Examiner

Steven Blount

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 86, 87, 92, 96, 97, 104 and 108-110 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 86, 87, 92, 96, 97, 104, 108, 109, 110 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)):

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 86, 87, 92, 96, and 108 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 6,584,534 to Kobayashi in view of U.S. Patent Application 2003/0115430 to Stone et al and either one of the following: U.S. patent 6,363,461 to Pawlowski et al or, in the alternative, U.S. patent 5,748,629 to Caldara et al.

With regard to claim 86, Kobayashi teaches communicating between buses in packet networks involving isochronous and asynchronous modes. Kobayashi also teaches that in a network of devices (camcorder, vcr, tv, - see col 5, lines 4+) which involve sending communications via packets (col 6, lines 67+), internal resources are reserved in advance for the transferring of isochronous packets. See col 7, lines 15+.

Kobayahsi does not, however, teach that 1) resources are allocated wherein they are "adapted to a receiving mode" for isochronous packets (for applicants first case – see line 11 of claim 86) *before* the second network receives packets from the first network; nor does Kobayashi teach that when asynchronous packets are sent, allocation of the resources occurs after the communication device receives the packets from the first network.

Art Unit: 2661

Stone teaches pre-reserving memory for the isochronous packets for a device 116 on a packet switched network which operates in the presence of asynchronous packets as well. See par 0038 (pre-reservation), par 0035 (asynchronous/isochronous), par 59 (packets), par 0005 (network).

Pawlowski et al teaches that in the time which remains after isochronous service has been reserved, this may be left for asynchronous service. See col 6, lines 12+. In col 6 lines 13+, it is stated that the memory arbiter can service asynchronous requests "if time remains in the asynchronous service period" which together suggest dynamically allocating the memory resources after the communication devices receives the data.

Caldara et al teaches assigning bandwidth for asynchronous data through initial allocation (col 6 lines 8+) or dynamically. Caldara also teaches distributing the unallocated bandwidth in a dynamic manner. See col 10 lines 1+.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have pre-allocated isochronous memory resources in Kobayashi in the receiving network in light of the teachings of Stone, and to have further allocated asynchronous memory resources in the said second network dynamically after the data is received, in light of the teachings of either Pawlowski et al or Caldara et al, in order to provide a means for providing for effective transfer of time sensitive (ie, isochronous data) between two networks when there is asynchronous data present as well.

With regard to claim 87, memory areas are reserved in the cache 360 of Stone.

With regard to claim 92, see cache 360 which is associated with CPU 320 in Stone.

With regard to claim 96, see memory 322 in Stone.

With regard to claim 108, see the rejection of claim 87, and also see par 63 of Stone and col 8 line 67 of Kobayashi (channel numbers).

3. Claims 97, 104, 109, and 110 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 6,584,534 to Kobayashi in view of U.S. Patent Application 2003/0115430 to Stone et al.

With regard to claim 97, Kobayashi teaches communicating between buses in packet networks involving isochronous and asynchronous modes. Kobayashi also teaches that in a network of devices (camcorder, vcr, tv, - see col 5, lines 4+) which involve sending communications via packets (col 6, lines 67+), internal resources are reserved in advance for the transferring of isochronous packets. See col 7, lines 15+. Kobayashi does not, however, teach that 1) resources are allocated wherein they are "adapted to a receiving mode" for isochronous packets (for applicants first case – see line 11 of claim 86) before the second network receives packets from the first network. Kobayashi also teaches memory storage areas 606 and 607.

Stone also teaches pre-reserving memory for the isochronous packets for a device 116 on a packet switched network which operates in the presence of asynchronous packets as well. See par 0038 (pre-reservation), par 0035 (asynchronous/isochronous), par 59 (packets), par 0005 (network). Stone teaches memory areas 368 and 364.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have pre-allocated isochronous memory resources in Kobayashi in the

Art Unit: 2661

receiving network In light of the teachings of Stone, in order to provide a means for providing for effective transfer of time sensitive (ie, isochronous data) between two networks.

With regard to claim 104, see CPU 320.

With regard to claim 109, see areas 364 and 322 (memory) of Stone et al.

With regard to claim 110, see par 63 of Stone and col 8 line 67 of Kobayashi (channel numbers).

Response to Arguments

4. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. Applicants arguments with respect to Kobayashi not teaching a packet network are addressed in the rejection of claim 86. The examiner does not require the applicant to send co-pending application 09/345,969, but appreciates applicants offer to do so.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

Art Unit: 2661

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Blount whose telephone number is 571 - 272 - 3071. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Chau Nguyen, can be reached on 571 - 272 - 3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

SB


5/26/05


Ajit Patel
Primary Examiner